

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/065,384	TSENG, JEN-SHOU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cheukfan Lee	2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an RCE and an amendment filed December 22, 2006.
2. ☒ The allowed claim(s) is/are 1-7, 9-18, and 20-32, now renumbered 1-30, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|---|

  
 Cheukfan Lee

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James J. Lynch on March 15, 2007. Mr. Lynch agreed to amend the abstract to be descriptive of the disclosed/claimed invention, which includes three key elements and their structural and positional relationship relative to the scanning module body casing and a document or scanning region, the three key elements being "a first light-guiding tube", "a second light-guiding tube" and "a collimating lens", since the amended abstract filed December 20, 2006 containing two lines is not descriptive of the invention. Mr. Lynch will clean up the language in the examiner-amended abstract later in a 312 amendment, if the language is found unacceptable later.

2. **Please amend the abstract as follows:**

**Rewrite the abstract to read as follows:**

-- A light-channeling apparatus for a scanning module comprises a first light-guiding tube, a second light-guiding tube, and a collimating lens positioned inside the first light-guiding tube. The first and second light-guiding tubes are attached to a body casing of the scanning module. The scanning module uses the first light-guiding tube having the collimating lens to channel light from a light source to a scanning region and uses the second light-guiding tube to channel light reflected from the scanning region to

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a light passage slit on the body casing, to minimize dispersion of light from the light source and keep external light out of the light transmission pathway. --

3. Claims 1-7, 9-18, and 20-32 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Claim 1 and its dependent claims 2-7 and 9-11 are allowable over the prior art of record, including the closest prior art of record, Tsai et al. (U.S. Patent No. 5,780,829), Fukushima et al. (U.S. Patent No. 5,136,150) and Kerschner et al. (U.S. Patent No. 5,995,243).

Tsai et al. does not disclose a collimating lens located inside the first light guiding tube (31 in Fig. 2). Although Kerschner et al. teaches positioning a lens between a document and a light source to enhance illumination from the light source to the document, on a second thought, the examiner agrees with Applicant's remarks that there is no suggestion or motivation to combine in this case because, to the Examiner, the first light guiding element (31) of Tsai et al. shown in Fig. 2, that is interpreted in the previous Office Action to meet the claimed first light-guiding tube, is relatively short that there is very little room for a collimating lens, which may not be big enough to accommodate a collimating lens.

Fukushima et al. discloses a first light guiding tube (light wave guide 70) and a second light guiding tube (light wave guide 30) for guiding light from the light source (50) to the document (40) and guiding light reflected by the document (40) to the image

sensor (10) (Fig. 2). However, the second light guiding tube (30) is not positioned between the document (40) and a light passage slit in the body casing because both the document (40) and a light passage slit are located at/near the same end of the light guiding tube (30) (Fig. 2); there is no light passage slit in the body casing (60) at the other end of the second tube (30) where image sensor (10) is disposed, and there is no lens inside the guide (70).

Claim 12 recites limitations similar to those of claim 1, which are not taught by any of the closest prior art of record, alone or in combination. Thus, claims 12 and its dependent claims 13-18 and 20-22 are allowable for the reason given for claim 1. Claim 23 is a method claim corresponding to the allowed apparatus claim 1. Thus, claims 23-30 are allowable for the reason given for claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Spears et al. (U.S. Patent Application Publication No. US 2006/0065858 A1),  
"Automatic object plane detection system and method", lens 72 placed in front of light  
source 70 in scanning module 20 to focus light onto document 24

6. Applicant is reminded of the improper claim of foreign priority filed on October 11, 2002 with the Combined Declaration and Power of Attorney (the older one). See "x" placed under "No" in the claim form, which is interpreted by the Office to mean that foreign priority was not claimed. No priority data was picked up by the Initial Application Examination Branch. Please refer to M.P.E.P. 201.11, page 200-66, section f, and also Rule 1.78(a) for filing a petition and fee for properly claiming foreign priority (or delayed claim of foreign priority).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee  
March 15, 2007